

**UNCLASSIFIED**

PE NUMBER: 0604796F  
 PE TITLE: Alternative Fuels

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>	DATE <b>February 2008</b>
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<b>BUDGET ACTIVITY</b> <b>04 Advanced Component Development and Prototypes (ACD&amp;P)</b>	<b>PE NUMBER AND TITLE</b> <b>0604796F Alternative Fuels</b>
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Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	0.000	0.000	28.464	47.202	15.056	9.559	3.240	Continuing	TBD
5287 Assured Fuels	0.000	0.000	28.464	47.202	15.056	9.559	3.240	Continuing	TBD

Note: PE 0604796F is a new PE in FY09. Previous alternative fuels work was accomplished in the "RDT&E for Aging Aircraft" PE (0605011F).

**(U) A. Mission Description and Budget Item Justification**

The Alternative Fuels program provides for the certification and transition of alternative fuels, including various synthetic fuels, bio-mass derived fuels, and fuel blend technologies for operational use in all legacy and future weapon systems, appropriate support equipment, and fuel delivery system infrastructure. This effort includes complete system evaluations, studies and analysis, subsystem and system-level testing, safety, environmental analysis, purchase of fuel stock, fuel storage and transport, and other USAF certification costs. Scope of activities include interaction with all USAF weapon systems single managers to accomplish complete certification activities for applicable weapon systems. In sum, this initiative provides assured fuels by decreasing US dependence on foreign oil and securing additional fuel-types on which to conduct world-wide operations.

**(U) B. Program Change Summary (\$ in Millions)**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Previous President's Budget			
(U) Current PBR/President's Budget	0.000	0.000	28.464
(U) Total Adjustments	0.000		
(U) Congressional Program Reductions			
Congressional Rescissions			
Congressional Increases			
Reprogrammings			
SBIR/STTR Transfer			

**(U) Significant Program Changes:**

FY09 funding of \$28.464M is the initial funding for this new PE in FY09. Previous alternative fuels work was accomplished in the "RDT&E for Aging Aircraft" PE (0605011F).

**Exhibit R-2a, RDT&E Project Justification**

DATE  
**February 2008**

<b>BUDGET ACTIVITY</b> <b>04 Advanced Component Development and Prototypes (ACD&amp;P)</b>				<b>PE NUMBER AND TITLE</b> <b>0604796F Alternative Fuels</b>			<b>PROJECT NUMBER AND TITLE</b> <b>5287 Assured Fuels</b>		
Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
5287 Assured Fuels	0.000	0.000	28.464	47.202	15.056	9.559	3.240	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

Note: PE 0604796F is a new PE in FY09. Previous alternative fuels work was accomplished in the "RDT&E for Aging Aircraft" PE (0605011F).

**(U) A. Mission Description and Budget Item Justification**

The Alternative Fuels program provides for the certification and transition of alternative fuels, including various synthetic fuels, bio-mass derived fuels, and fuel blend technologies for operational use in all legacy and future weapon systems, appropriate support equipment, and fuel delivery system infrastructure. This effort includes complete system evaluations, studies and analysis, subsystem and system-level testing, safety, environmental analysis, purchase of fuel stock, fuel storage and transport, and other USAF certification costs. Scope of activities include interaction with all USAF weapon systems single managers to accomplish complete certification activities for applicable weapon systems. In sum, this initiative provides assured fuels by decreasing US dependence on foreign oil and securing additional fuel-types on which to conduct world-wide operations.

**(U) B. Accomplishments/Planned Program (\$ in Millions)**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Certify Air Force weapon systems to operate using any number of alternative fuel stocks. Includes costs to purchase/store/transport fuel, perform system analysis/testing, assess safety impacts, and complete required certification activities.			26.390
(U) Determine compatibility/operability of materials, valves, fuel pumps, Automated Tank Gauging (ATG), distribution pipelines, Fuels Mobility Support Equipment (FMSE) and other applicable storage stability, refueling and full scale filtration equipment evaluations, determine environmental impacts/requirements satisfaction for new fuel delivery to base storage and travel required for site visits, meeting attendance for information collection/status updates, and those visits necessary to keep initiative management on track.			0.796
(U) Mission Support Costs - costs required to support and manage the program, to include travel and supplies			1.278
(U) Total Cost	0.000	0.000	28.464

**(U) C. Other Program Funding Summary (\$ in Millions)**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) Fuel - 3400			27.900	21.455	12.795	6.350	2.772		

**(U) D. Acquisition Strategy**

Funding may be executed internally within the 77th Aeronautical Systems Wing via full and open competition or released to other organizations for alternative fuel certification projects for which they are the Office of Primary Responsibility (OPR). The OPRs will determine the most appropriate contract vehicle to accomplish the project.

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**Exhibit R-3, RDT&E Project Cost Analysis**

DATE

**February 2008**

BUDGET ACTIVITY				PE NUMBER AND TITLE					PROJECT NUMBER AND TITLE			
<b>04 Advanced Component Development and Prototypes (ACD&amp;P)</b>				<b>0604796F Alternative Fuels</b>					<b>5287 Assured Fuels</b>			
(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method &amp; Type</u>	<u>Performing Activity &amp; Location</u>	<u>Total Prior to FY 2007 Cost</u>	<u>FY 2007 Cost</u>	<u>FY 2007 Award Date</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
(U) <u>Support</u> Certify Air Force weapon Systems to operate using a variety of alternative fuel stocks, purchase/store/transport fuel, perform system analysis/testing, assess safety impacts, and complete all other certification requirements	Various	77th AESW/AF						26.390			26.390	
Determine compatibility/operability of materials, valves, fuel pumps, Automated Tank Gauging (ATG), distribution pipelines, Fuels Mobility Support Equipment (FMSE) and other applicable storage stability, refueling and full scale filtration equipment evaluations, determine environmental impacts/requirements satisfaction for new fuel delivery to base storage and travel required for site visits, meeting attendance for information collection/status updates, and those visits necessary to keep initiative management on track.	Various	AFPET						0.796			0.796	
Subtotal Support Remarks:			0.000	0.000		0.000		27.186		0.000	27.186	0.000
(U) <u>Management</u> Management and support costs associated with the Alternative Fuels effort to include travel and supplies	Various							1.278			1.278	
Subtotal Management Remarks:			0.000	0.000		0.000		1.278		0.000	1.278	0.000
(U) Total Cost			0.000	0.000		0.000		28.464		0.000	28.464	0.000

Exhibit R-4, RDT&E Schedule Profile

DATE  
February 2008

BUDGET ACTIVITY  
04 Advanced Component Development and Prototypes (ACD&P)

PE NUMBER AND TITLE  
0604796F Alternative Fuels

PROJECT NUMBER AND TITLE  
5287 Assured Fuels

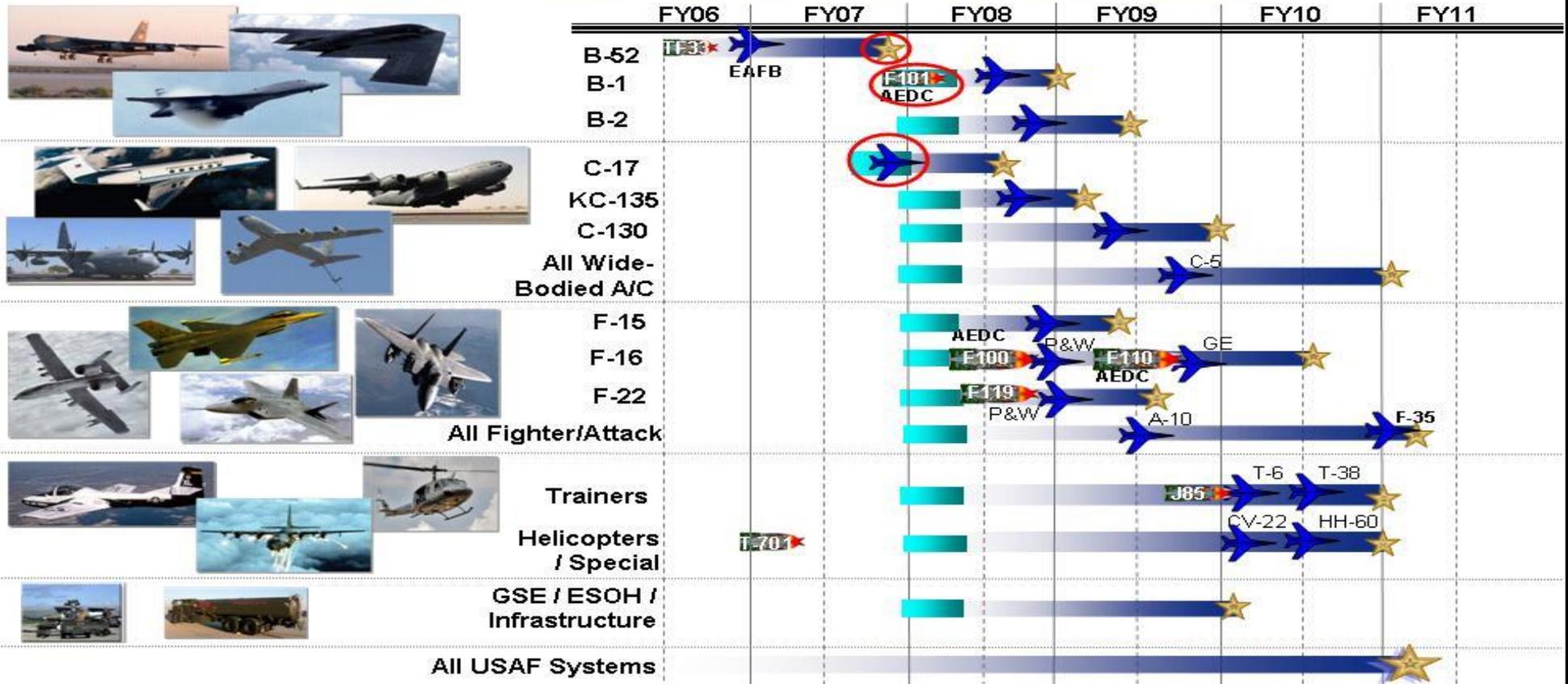


U.S. AIR FORCE

# Certification Schedule



Maximizing War-winning Capabilities For... Every Airman... Every Aircraft



As of: 08 Jan 08



Exhibit R-4a, RDT&E Schedule Detail

DATE

February 2008

BUDGET ACTIVITY

04 Advanced Component Development and Prototypes (ACD&P)

PE NUMBER AND TITLE

0604796F Alternative Fuels

PROJECT NUMBER AND TITLE

5287 Assured Fuels

(U) Schedule Profile

FY 2007

FY 2008

FY 2009

(U) Certification Efforts

1-4Q

(U) Flight Tests

1-4Q

(U) Engine Tests

2-3Q